

**OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD**

2520 Venture Oaks Way, Suite 350

Sacramento, CA 95833

(916) 274-5721

FAX (916) 274-5743

Website address www.dir.ca.gov/oshsb**FINAL STATEMENT OF REASONS****CALIFORNIA CODE OF REGULATIONS****TITLE 8: Chapter 4, Subchapter 7, Article 4, Section 3273
of the General Industry Safety Orders****Protection from Falling Objects**

There are no modifications to the information contained in the Initial Statement of Reasons except for the following substantive and sufficiently related modifications that are the result of public comments and Board staff evaluation.

Construction Safety Orders (CSO) Section 1513, Housekeeping, subsection (g):

Existing CSO Section 1513(g), applicable to the construction industry, prohibits the throwing of objects from buildings or structures to areas where employees may be located unless the area where the material falls is guarded by fences, barricades, or other means to prevent employees from entering the area and being struck by falling objects. Proposed amendments to CSO Section 1513(g) would have retitled the subsection: "Prevention of objects from falling, and methods of lowering objects" and would have essentially relocated the requirements of CSO Section 1513(g) into General Industry Safety Orders (GISO) Section 3273(f), making them applicable to general industry, including construction. Comments from members of the construction industry, however, indicated that they prefer to maintain the existing requirements of Section 1513(g) within the Construction Safety Orders. The Board has determined that no conflicts will result from leaving CSO Section 1513(g) as presently codified, and adopting similar requirements into GISO Section 3273, which will apply to general industry. Proposed amendments to GISO Section 3273 will include all industries, including construction except that where like conditions and hazards exist, the Construction Safety Orders shall take precedence for that industry. Therefore, the purpose of this modification is to withdraw the proposed amendment to CSO Section 1513(g). The necessity for this modification is due to differences that exist between general industry and construction.

GISO Section 3273(e), Title:

Proposed new Section 3273(e) entitled, "Preventing objects from falling" is modified to read: "Protection from falling objects." The purpose of this proposed modification is to make the title more descriptive of the contents of the subsection, which contains provisions both for preventing objects from falling and for protecting employees from objects that may fall unintentionally due to accidental and/or

unforeseeable displacement. The necessity for this modification is to clarify the content of Section 3273(e).

Section 3273(e)(1):

Proposed new subsection (e)(1) required objects to be secured against accidental displacement when not in use where there was an employee exposure below an elevated work area and included alternatives to securing objects. Due to comments received from the public regarding a lack of clarity in the proposed text, this section has been modified to include three subparagraphs, A-C, specifying the means/methods required to protect employees from falling objects. The purpose of this modification is to clarify the means/methods available for protecting employees exposed to the hazard of unintentional falling objects. The necessity for this modification is to ensure consistency and equivalency with the federal counterpart regulation contained in 29 CFR 1926.501(c) and to address clarity concerns expressed by the regulated public.

Section 3273(f)(1):

Proposed new subsection (f)(1) required objects to be lowered in a controlled manner when there is an employee exposure below the elevated work area. Proposed new subsection (f)(2) provided for situations where controlled lowering was not practical or where it would subject employees to a greater risk of injury and included the use of effective physical barriers such as overhead protection, fencing, or barrier tape attended by spotters. Public comments indicated that the availability of alternatives to controlled lowering was not clear. A modification was made to clarify the availability of alternatives to controlled lowering by adding the word “or” at the end of subsection (f)(1). The necessity for this modification is to address public concerns regarding the clarity of the originally proposed text.

Section 3273(f)(2):

Proposed new subsection (f)(2) contained provisions for safely lowering objects when it is not practical to lower them in a controlled manner. Options included the use of effective physical barriers such as overhead protection, fencing, or barrier tape attended by spotters.

The necessity for spotters to attend barrier tape was questioned during the 45-Day public comment period; and a 15-Day Notice of Proposed Modifications was proposed to eliminate a direct reference to barrier tape from the proposed regulation. However, dialogue at the Board’s May 22, 2003, Business Meeting indicated the proposed modifications were ambiguous on the safe use of barrier tape as an effective physical barrier. Consequently, a second 15-Day Notice of Proposed Modifications was prepared to clarify other acceptable means of providing an effective physical barrier that do not require the use of a spotter. The second 15-Day Notice clarifies that a spotter is only necessary when barrier tape is used to demarcate an affected work area during the lowering of objects where controlled lowering is not practical, or where it would subject employees to a greater risk of injury.

Other modifications made as part of the original 15-Day Notice of Proposed Modifications include deletion of the reference to “general public” to focus the regulation on employee safety, and “overhead protection” has been clarified as being a canopy. The purpose and necessity of the

proposed modifications is to address public concerns about costs and means of providing effective physical barriers to protect employees when objects cannot be lowered in a controlled manner.

Section 3273(f)(3):

Proposed new subsection (f)(3) contained a requirement for signs to be posted at the perimeter of any work area exposed to the hazard of falling objects to warn employees of the hazard. Public comments, however, questioned the necessity for signs to be posted whenever material is lowered in a controlled manner. Furthermore, comments indicated that the proposed text was unclear whether the requirement for warning signs applied to all instances of intentional lowering, including controlled lowering, or just to instances where controlled lowering was not possible. A modification was made to relocate the requirement for warning signs from subsection (f)(3) to new subsection (f)(2)(A) to clarify that it only applies to instances where controlled lowering is not possible, consistent with CSO Section 1513(g). The purpose and necessity of this modification is to clarify the requirements for warning signs.

SUMMARY AND RESPONSE TO WRITTEN AND ORAL COMMENTS
RESULTING FROM THE 45-DAY PUBLIC COMMENT PERIOD

I. Written Comments:

Mr. Sam Iler, Chair, Associated General Contractors of America (AGC), San Diego Safety Committee, by letter dated October 14, 2002.

Comment #1:

Mr. Iler objected to the proposal to effectively relocate the provisions of CSO Section 1513(g) into GISO Section 3273. Mr. Iler stated that falling object hazards in the construction industry are unique and very different from those in general industry and that they cannot be addressed by a “one size fits all” regulation. He opined that the means, methods and environment of the respective industries preclude common regulations for both.

Response:

After consideration of Mr. Iler’s concerns and comments, the Board agrees with his comments regarding the proposed relocation and proposes to withdraw CSO Section 1513(g) from the scope of this rulemaking.

Comment #2:

Mr. Iler commented on requirements for securing materials, equipment and tools aloft against accidental displacement when not in use which are proposed in GISO Section 3273(e)(1). He stated that this requirement would make it impossible to construct a building due to large numbers of tools, materials and equipment used in construction. Furthermore, he stated that barriers at building perimeters are already regulated by CSO Section 1621 (railings and toeboards) and that, in his opinion, additional barrier regulations are unneeded.

Response:

The original proposal required tools, material, and equipment to be secured when not in use. Alternatives were available which included provisions such as, but were not limited to, barriers and warning signs at the perimeter of the affected work area below. However, after considering Mr. Iler's comment, the Board agrees that modification of Section 3273(e)(1) is necessary. The Board proposes to modify Section 3273(e)(1) to list safeguards for protecting employees from falling objects based on Federal OSHA 1926.501(c). The safeguards include, but are not limited to, guardrail systems, toeboards, screens, canopies, or physical barriers to prevent entry into the area of exposure. By virtue of being in the GISO, these alternatives will apply to all industries; however, vertical standards will take precedence for the construction industry where inconsistencies may be found to exist.

Comment #3:

Mr. Iler expressed concerns that he thought proposed subsection (e)(1) would require "all objects aloft...including materials, equipment, and tools...to be secured against accidental displacement...by wind, or other foreseeable or unforeseen forces." He commented that an employer does not have direct control or influence over unforeseeable circumstances.

Response:

This comment appears to have been based on language contained in the Initial Statement of Reasons, but not in the proposed regulatory text. Staff agrees with Mr. Iler's concerns and has modified subsection (e)(1) to address those concerns.

Comment #4:

Mr. Iler commented on requirements of subsections (a), (b), (c), (d), and (l) of Section 3273 which he felt are unnecessary since they are either inapplicable or are regulated elsewhere in the CSO.

Response:

Mr. Iler's comment regarding subsections (a), (b), (c), (d), and (l), are outside the scope of this rulemaking action since no amendments are proposed to these subsections. Should Mr. Iler wish the Board to consider changes to these subsections, he may petition the Board for a separate rulemaking action.

Comment #5:

Mr. Iler commented on Board staff's determination that the proposed regulations will have no cost impact on the regulated public and requested copies of the review documents, calculations and any other documentation to support these conclusions.

Response:

The Board recognizes that certain provisions of the original proposal may have had an unintended cost impact; however, Board believes that modifications made in response to public comments have addressed these concerns. Concerns about cost and economic impact have been addressed by further clarification of alternatives available for compliance in GISO Section 3273(e)(1) and by modifications to

Section 3273(f)(2), which now include options for passive or active safeguards. The Board therefore believes that the proposed regulations as modified will have no fiscal impact.

The Board thanks Mr. Iler for his comments and participation in the Board's rulemaking process.

Mr. John Vocke, Attorney – OSHA Compliance, Pacific Gas & Electric Company, by letter dated October 16, 2002.

Comment:

Mr. Vocke stated that PG&E generally supports the proposed regulations; however, he took exception to the requirement of Section 3273(f)(3) that would require signs at all work locations where there is an employee exposure below an elevated work location, whether or not materials, equipment or tools are lowered in a controlled manner. PG&E requested that the requirement for signs be limited to the perimeter of work areas where controlled lowering is not practical; otherwise, in the electric utility work environment, a warning sign would be required at the base of each pole that is scaled by a line worker, even if objects are lowered in a controlled manner.

Response:

The Board agrees with Mr. Vocke's observation that warning signs are unnecessary where objects are being lowered in a controlled manner, and has modified Section 3273(f) to indicate that warning signs will only be required where controlled lowering is not practical, or would subject employees to a greater risk of injury.

The Board thanks Mr. Vocke for his comment and participation in the rulemaking process.

II. Oral Comments:

Oral comments received at the October 17, 2002 Public Hearing.

Mr. Steve Johnson, Director of Safety and Compliance Services, representing Associated Roofing Contractors of the Bay Area Counties, Inc.

Comment #1:

Mr. Johnson stated that, due to differences between construction processes and general industry, the Association is opposed to the proposal to effectively relocate the provisions of CSO Section 1513(g) into GISO Section 3273.

Response:

The Board agrees with Mr. Johnson's comment regarding the proposed relocation of CSO Section 1513(g) and proposes to withdraw CSO Section 1513(g) from the scope of this rulemaking.

Comment #2:

Mr. Johnson commented on the GISO Section 3273(e) requirement that all objects must be secured on the roof. He said that this wording leaves employers open to the interpretation of Cal/OSHA inspectors as to what is secured and what is not.

Response:

Although the original proposal included alternatives to securing materials on the roof, the Board agrees with Mr. Johnson's comment to the extent that Section 3273(e) has been reformatted and modified to list acceptable means and methods for protecting employees from falling objects based on Federal OSHA 1926.501(c). See previous response to Mr. Iler's comment #2 for further details.

Comment #3:

Mr. Johnson commented that Section 3273(f)(1) requires all objects to be lowered in a controlled manner by hand lines, material handling equipment or enclosed chutes. He said that this requirement will be a big problem for roofers and that it isn't feasible in roofing tear-off, particularly in residential roofing.

Response:

The original proposal contained an alternative [3273(f)(2)] to the requirement for controlled lowering; however, the Board agrees that clarification would be helpful for the regulated public. Therefore, the Board proposes to add "or" to the end of Section 3273(f)(1) to clarify acceptable precautions when controlled lowering is not possible.

Comment #4:

Mr. Johnson commented that 3273(f)(2) will require a spotter during the entire roofing tear-off operation and that since most employers work on a close profit margin, this would be a costly burden.

Response:

The original proposal only required a spotter when barrier tape was used to prevent access to the drop zone since the advisory committee was concerned that barrier tape alone would not be an effective barrier. The Board proposes to modify this subsection to clarify additional alternative means and methods available to secure the drop zone, including passive methods such as fencing and barricades. Spotters will only be required when barrier tape is used in general industry to demarcate the drop zone. Roofing contractors are regulated by the Construction Safety Orders and Section 1513(g) which has been removed from this rulemaking.

Comment #5:

Mr. Johnson stated that Section 3273(f)(3) requires employers to post warning signs but that it is unclear what the signs should say and what is required for compliance.

Response:

Section 3273(f)(3) has been relocated into Section 3273(f)(2)(A). The requirement for warning signs is consistent with the requirements of CSO Section 1513(g) upon which the proposed modified Section 3273(f)(2) is based. Furthermore, the Section contains a cross-reference to GISO Section 3340 for requirements for warning signs. GISO 3340 contains performance-oriented requirements for warning sign approval, shape, color, and text. The Board therefore declines to make any changes based on this comment since the proposal contains performance-oriented standards, which are preferred by a majority of the regulated public and will be most effective in each particular situation.

The Board thanks Mr. Johnson for his comments and participation in the Board's rulemaking process.

Board Member dialogue at the October 17, 2002 Public Hearing Meeting:

Board Member Victoria Bradshaw, Management Representative, Occupational Safety and Health Standards Board.

Comment:

Board Member Bradshaw inquired about the necessity for the rulemaking and commented that the rulemaking should not be in response to a single incident.

Response:

The necessity for the rulemaking was discussed and established by consensus at the May 18, 2002 Advisory Committee. In addition, the rulemaking process addresses issues where California standards are not at least as effective as their federal counterpart.

Board Member Liz Arioto, Management Representative, and Art Murray, Occupational Safety Representative, Occupational Safety and Health Standards Board.

Comment #1:

In response to concerns raised at the October 17, 2002, Public Hearing by Messrs. Johnson and Vocke regarding various issues relating to proposed changes to the Construction Safety Orders and the General Industry Safety Orders (see comments above), Board Member Arioto suggested that the advisory committee be reconvened. Board Member Art Murray concurred with Board Member Arioto's suggestion.

Response:

Board Staff determined that reconvening the advisory committee would likely prevent conclusion of the rulemaking within the one-year time limit prescribed by the Administrative Procedure Act for the rulemaking notice, thus necessitating a new rulemaking process. Board staff requested and received consent from the Board to consult with the commenters in an attempt to respond to their concerns by way of a 15-Day Notice of Proposed Modifications. Board staff believes the issues raised at the Public Hearing have been resolved via modifications reflected in the 15-Day Notice of Proposed Modifications.

RESPONSE TO COMMENTS TO THE 15-DAY NOTICE OF
PROPOSED MODIFICATIONS DATED APRIL 8, 2003

Summary and Response to Written Comments:

No written comments were received.

RESPONSE TO COMMENTS ARISING FROM THE MAY 22, 2003 BUSINESS MEETING TO
ADOPT PROPOSED AMENDMENTS TO CSO SECTION 1513 AND GISO SECTION 3273.

Board Member dialogue at the May 22, 2003 Business Meeting:

Board Members Art Murray, Occupational Safety Representative and Liz Arioto, Management
Representative, Occupational Safety and Health Standards Board.

Comment #1:

Board Member Murray questioned the 15-Day Notice of Proposed Modifications which proposed deletion of references to barrier tape in Section 3273(f)(2). He had concerns about the effectiveness of barrier tape as a physical barrier unless a spotter is in attendance with its use. Board Member Arioto shared his concern and they directed staff to address the acceptable use of barrier tape as an effective physical barrier.

Response:

A second 15-Day Notice of Proposed Modifications was prepared which clarifies that barrier tape, when “attended by a spotter who is authorized to effectively restrict entry into the area and who is on the same level as the area of the exposure” will be considered a method or means of providing an effective physical barrier. A spotter will only be required when barrier tape is used to restrict access. Other substantial passive means of restricting access, such as fencing and barricades, will be considered effective physical barriers without the necessity for attendance by a spotter. Staff is of the opinion that the modifications will address the cost concerns by providing for means or methods that do not require an attendant, while addressing safety concerns about the use of barrier tape.

Board staff thanks Board Members Arioto and Murray for their comments and participation in the rulemaking process.

RESPONSE TO COMMENTS TO THE 15-DAY NOTICE OF
PROPOSED MODIFICATIONS DATED JUNE 12, 2003

Summary and Response to Written Comments:

Mr. Steven Johnson, Director of Safety and Compliance Services, Associated Roofing Contractors of
the Bay Area Counties, Inc., by letter dated June 16, 2003.

Comment:

Mr. Johnson thanked the Board for mailing him the latest proposed changes to Section 3273 and indicated that he was unable to attend the May 22, 2003 Public Hearing. With reference to the October 2002 Public Hearing when the package was heard by the Board, Mr. Johnson stated that the Board rejected the staff’s proposed revisions and recommended staff reconvene the advisory committee to explore further changes to the proposal. Board staff later received permission from the

Board to resolve the issues raised at the Public Hearing by Mr. Johnson through informal discussions with the commenters.

Mr. Johnson stated that on Friday, May 30, 2003 he sent an e-mail to Board staff requesting that a “note” be added to Section 3273(f) to clarify that the Construction Industry is first regulated by Construction Safety Orders Section 1513(g). Mr. Johnson stated that upon a review of the proposal it appears that staff did not add the suggested language to Section 3273. Mr. Johnson stated that the suggested language for the “note” would help to clarify which regulation applies to the construction industry while saving the Division of Occupational Safety and Health and industry time and money on costly appeals to citations that mistakenly cite the wrong regulation.

Response:

The Board notes that CSO Section 1502 states that:

“(a) These Orders establish minimum safety standards whenever employment exists in connection with the construction, alteration, painting, repairing, construction maintenance, renovation, removal, or wrecking of any fixed structure or its parts. These Orders also apply to all excavations not covered by other safety orders for a specific industry or operation.”

“(b) At construction projects, ***these Orders take precedence over any other general orders*** that are inconsistent with them, except for Tunnel Safety Orders or Compressed Air Safety Orders.” (Emphasis added.)

Roofing operations are regulated in the CSO by industry-specific requirements contained in Article 30, Roofing Operations and Equipment. The Board does not believe there is any doubt that Mr. Johnson’s operations are covered by Article 30 regulations of the CSO.

Roofing operations are a type of construction project subject to operation-specific regulations that address housekeeping issues such as materials thrown or dropped from buildings or structures in Section 1513(g). As stated in Section 1502(b), the requirement contained in Section 1513(g) takes precedence over any orders contained in the GISO. The intent of this regulation is to clarify to the employer that industry or operation-specific standards take precedence over the general requirements contained in the GISO.

Section 1502(c) states that machines, equipment, processes (e.g., disposal of waste material) and operations (e.g., roofing) not specifically covered by these Orders (CSO) shall be governed by other applicable general safety orders.

Consequently, for the reasons stated above, the Board believes the addition of a note to Section 3273 would be unnecessary as the applicable safety orders in the case of roofing operations are already adequately clear. Therefore, the Board does not believe modification of Section 3273 is necessary.

DETERMINATION OF MANDATE

These regulations do not impose a mandate on local agencies or school districts as indicated in the Initial Statement of Reasons.

ALTERNATIVES CONSIDERED

Comments received during the 45-day and 15-day public comment periods have resulted in modifications, additions, and clarification of alternatives available. No other alternatives considered by the Board would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the adopted action.